

## ***Acmella repens* (Walt.) Rich. (Asteraceae) - A new distributional record for Old World Countries**

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### **Abstract**

*Acmella repens* (Walt.) Rich. (Asteraceae), hitherto considered as endemic to America, is collected from India very recently while exploring Asteraceous plant wealth in southern parts of India. This rare species is collected from Anantagiri hills of Visakhapatnam District of Andhra Pradesh, India.

### **INTRODUCTION**

Genus *Acmella* of the tribe Heliantheae, Asteraceae includes about 30 species in the world. Richard (1807) first described the genus. Earlier Cassini (1622), De Candolle (1836) and Moore (1907) treated it under the genus *Spilanthes*. However, Jansen (1981, 1985) distinguished *Acmella* from *Spilanthes* with its distinguished characters like petiolate leaves, radiate heads and dimorphic achenes without corky margins.

During the routine exploration trips in Andhra Pradesh, *Acmella repens* (Walt.) Rich., was collected from Anantagiri hills of Visakhapatnam District. The specimens were identified based on critical taxonomic studies and comparison with authenticated specimens housed at CAL, Calcutta (collected from USA). Till date, the geographic distribution of this taxon is restricted to United States, Mississippi to southern Louisiana, Texas and northern Mexico only. The present collection from Andhra Pradesh forests is the first report in the old world countries. To ascertain the authenticity, these plants were introduced into the botanical gardens of Sri Krishnadevaraya University and found that all the characters were exactly same and consistent. The nomenclatural citation along with detailed description, phenology and line drawings are provided to facilitate easy identification.

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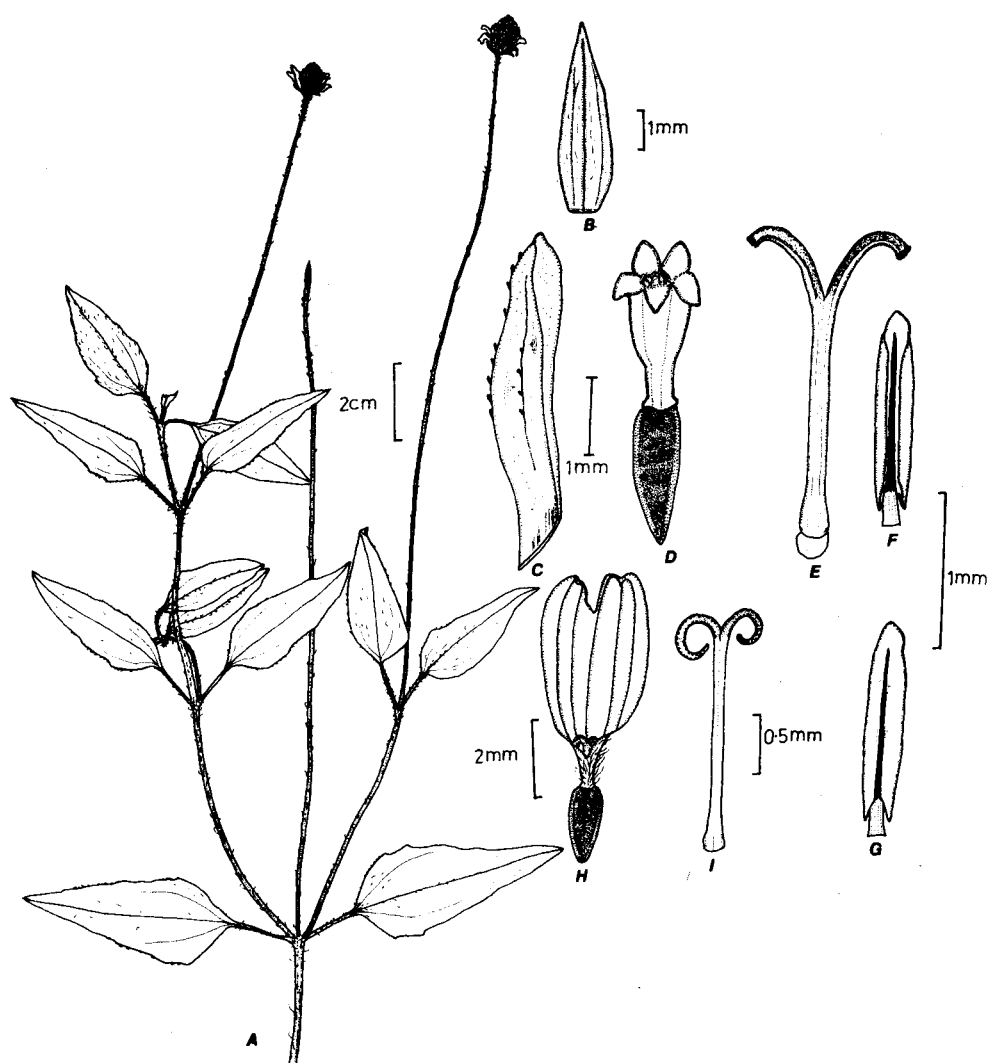


Fig. 1. *Acemella repens* (Walt.) L.C. Rich. new to old world : A. Twig; B. Involucral bract; C. Palea; D. Bisexual floret; E. Style of bisexual floret; F & G. Anthers; H. Ray floret; I. Style of ray floret.

*Acmella repens*

*Acmella repens* (Walt.) L.C. Rich. In Persoon. Syn. Pl. 2 : 473. 1807. *Anthemis repens* Walt., Fl. Carol. 211. 1788. *Acmella oppositifolia* (Lamarck) Jansen var. *repens* (Walt.) Jansen, Syst. Bot. Monographs, 8(3) : 34. 1985. *Spilanthes repens* (Walt.) Michaux, Fl. Bar.-amer. 2 : 131. 1803.

Diffuse herb, stem striated, pubescent with soft hairs in lower parts, rooting at lower nodes, villous when young, branches ascending. Leaves simple, opposite, petiole to 1.5 cm, pilose, suprabasally 3-nerved, veins raised on lower surface; lanceolate, 3.5 - 4.5 x 1.2 - 2.2 cm, almost glabrous, pilose along veins and on lower surface; obtuse at base, distantly serrate or entire, ciliate, acute. Heads solitary, terminal, appears axillary due to further growth of axillary branches, obtuse at apex, yellow, heterogamous, rayed, 1 cm (excluding ligule); peduncle very long, 10-18 cm, sparsely pilose, densely so towards apex below the head. Involucral bracts 12, 2-seriate, 5mm, subequal, outer oblong - lanceolate, not scarious, 3 veined, pubescent on dorsal side, ciliate along margins, obtuse; inner ones elliptic - lanceolate, scarious and ciliate towards margin, obtuse. Receptacle conical, 8 mm, acute at apex, paleaceous. Palea 4.5 mm, vertically folded, boat shaped, 3-veined, pubescent with colleters along veins, margins entire, apex obtuse. Ray florets around 12, slightly exceeding the involucral bracts, elliptic-obovate or oblong, tube 1 mm, multicellular hairy, ligule 4.5 mm, around 5-veined, veins hairy on dorsal side, usually 2-lobed 0.6 mm, obtuse or retuse; style linear, 2 mm, recurved, papillate, truncate at apex. Bisexual florets around 140, 2.2 mm, tube 0.6 mm, bulged at base, glabrous, limb 1.6 mm, 5-lobed, lobes ovate, obtuse, 0.5 mm, papillate. Stamens 5, anthers 1.1 mm, oblong, hood ovate, obtuse, base sagittately auricled, auricles acute. Style 2.1 mm, not exerted, branches linear, recurved, papillate, truncate at apex. Pappus absent. Achenes dimorphic, generally epappose, 1.8-2.0 mm, marginal ones trigonous, inner ones laterally compressed or biconvex, black, glabrous, margins corky, cilia absent.

*Ecology* : Marshy areas at high elevations, rare. *Flowering* : October to January.

*Specimens examined* : Anantagiri forest, 28.01.1995 C.P. Raju 9983

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**R.R. Venkta Raju and C. Prabhakar Raju****Literature cited**

- Cassini, H. 1822. *Spilanthes*. In Dictionaire de sciences naturelles 24 : 328-331.
- De Candolle, A.P. 1836. *Spilanthes*. In Prodromus systematics naturalis regni vegetabilis. 5 : 622-626.
- Moore, A.H. 1907. Revision of the genus *Spilanthes*. Proc. Amer. Acad. Arts. 42 : 521-569.
- Jansen, R.K. 1981. Systematics of *Spilanthes* (Compositae : Heliantheae). Systematic Botany 6 (3) : 231-257.
- Jansen, R.K. 1985. The Systematics of *Acmella* (Asteraceae : Heliantheae). Systematic Botany Monograph. 8 : 31-34.